

(21) Application No 8803900

(22) Date of filing 19 Feb 1988

(30) Priority data
(31) 8705775 (32) 11 Mar 1987 (33) GB

(71) Applicant
The Mead Corporation
(Incorporated in USA-Ohio)

Courthouse Plaza NE, Dayton, Ohio 45463,
United States of America

(72) Inventor
Emanuel Negelen

(74) Agent and/or Address for Service
J M Hepworth & Co
36 Regent Place, Rugby

(51) INT CL⁴
B65D 5/48

(52) Domestic classification (Edition J):
B6P E1X

(56) Documents cited
US 4465181

(58) Field of search
B6P
Selected US specifications from IPC sub-class
B65D

(54) Article carrier carton

(57) A basket style bottle carrier is made from a blank and includes a pair of medial partition structures (8, 17, 38; 9, 19, 40) extending centrally of the carrier towards one another from opposite ends of the carrier. One of the medial partition structures (8, 17, 38) is connected to the other of the medial partition structures (9, 19, 40) by a bridging medial panel (38a) struck from a panel (38) of the one medial partition structure and bridging across adjacent inner edges of the medial partition structures (38, 40). A handle structure (27, 28, 29, 30) is attached to medial partition structure (9, 19, 40). Transverse partition panels (54, 55, 56, 57) are struck out of partition structures (8, 17, 9, 19) and adhered to side walls (1, 12) by anchoring tabs (62, 65, 68, 71).

Fig.2.

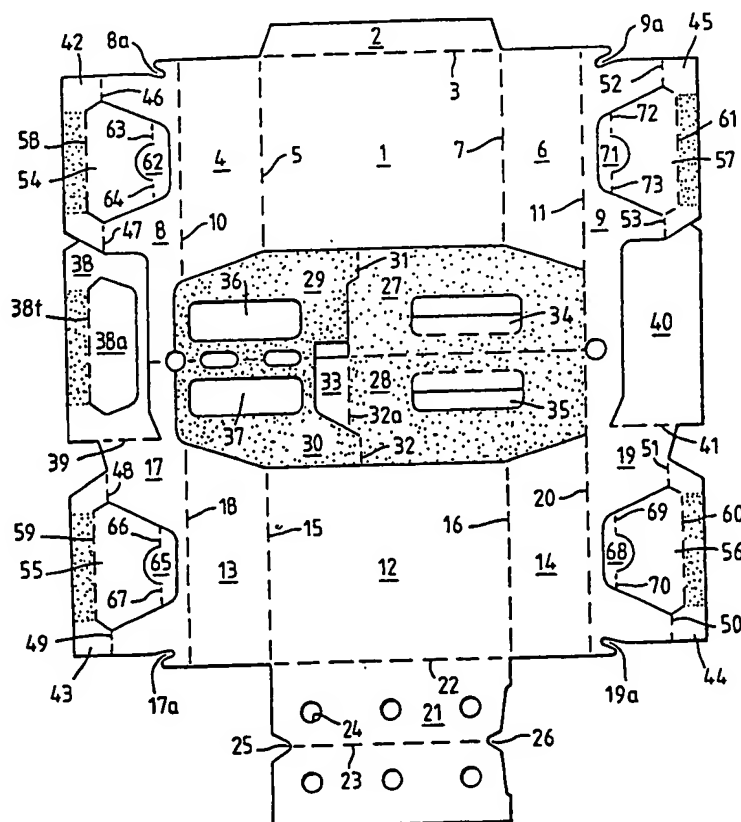


Fig. 2.

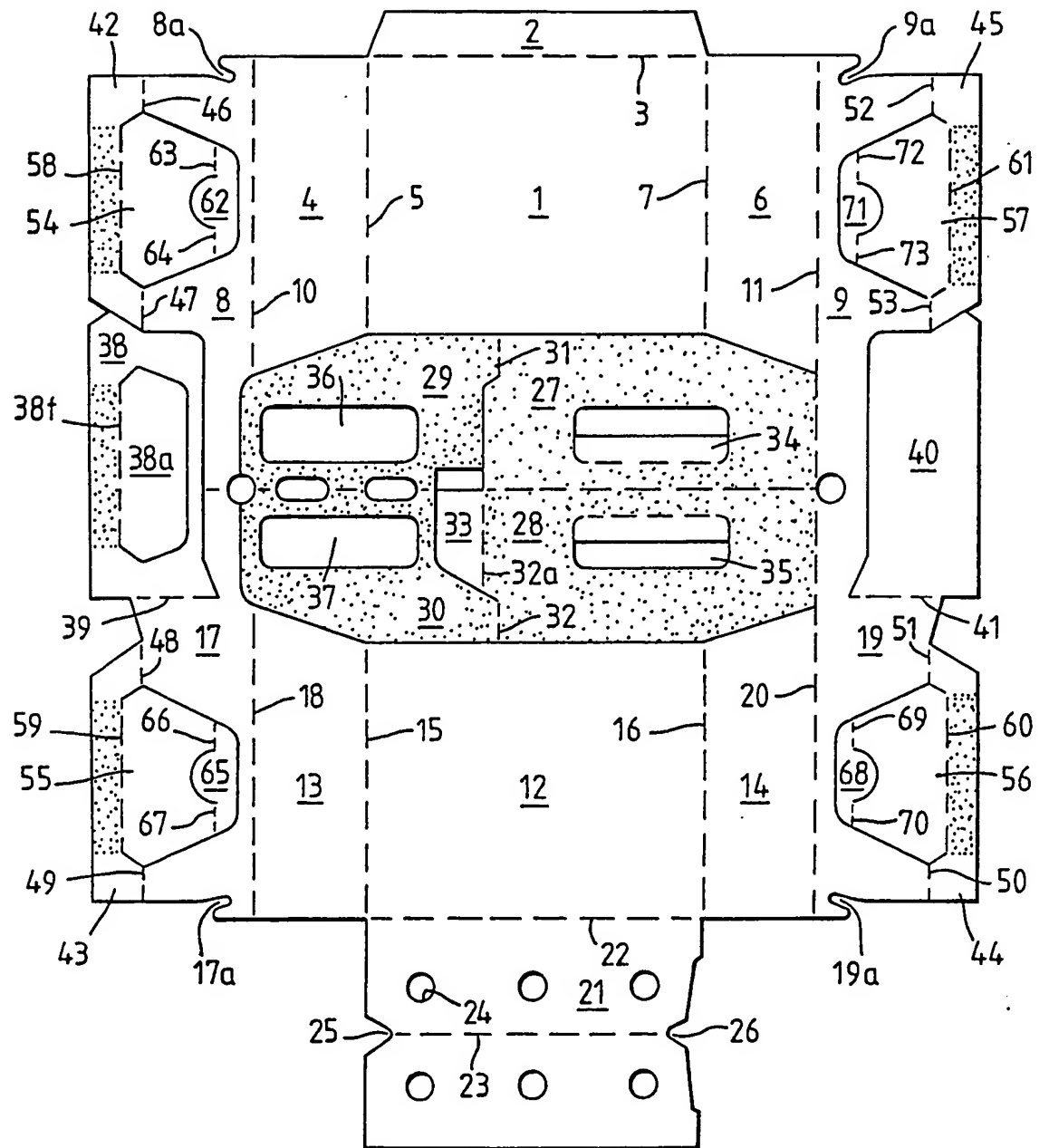
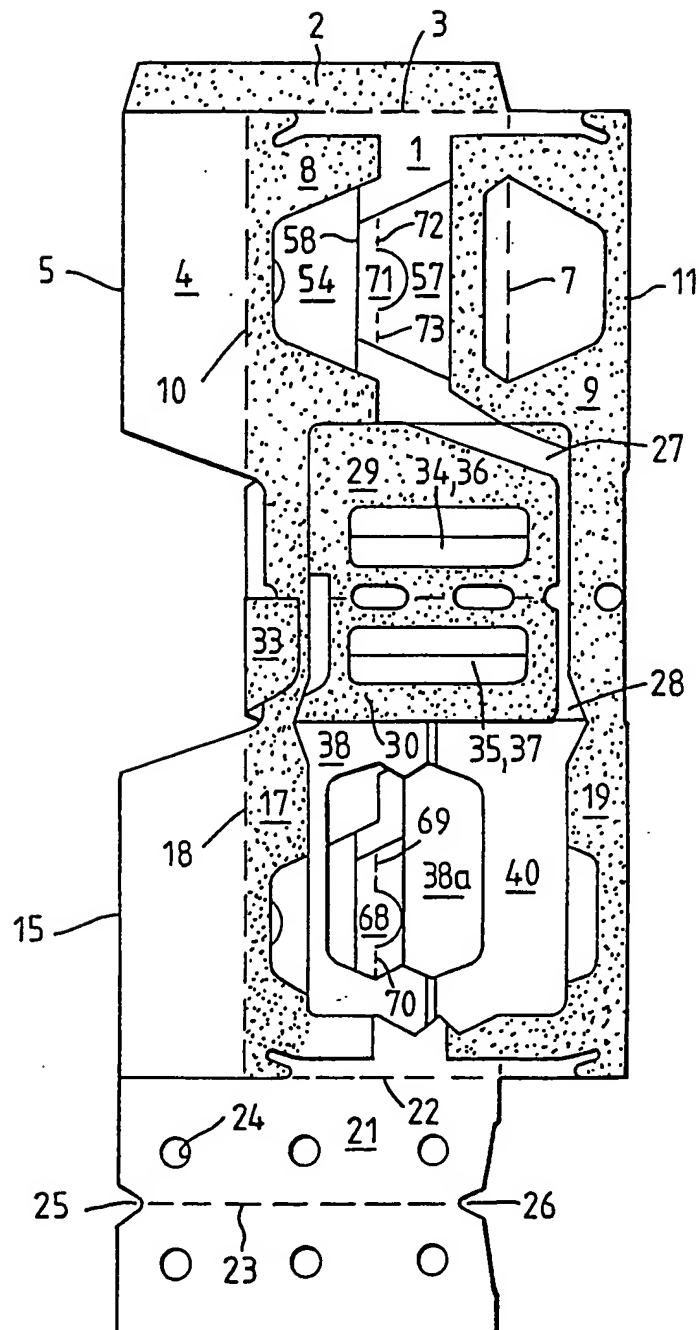


Fig. 4.



given length of web stock, a carrier construction similar to those now known was maintained but in which the overall width of the blank was reduced by some 16 mm. This width reduction however resulted in the problem that the medial partition panels could not be overlapped to create the two ply connection between the centre compartments of the carrier.

In order to overcome this problem, a smaller flap is struck from one of the medial partition panels to provide a bridge between the medial partition panels. The bridge also has the advantage of forming a part of a triple layer of material at the division between the centre compartments to decrease the risk of bottle breakage.

To this end, one aspect of the invention provides an article carrier comprising a pair of side walls disposed in parallel spaced relation to each other, end wall panels hinged respectively to the ends of said side walls and extending inwardly therefrom, a pair of medial structures foldably joined to the medial edges of respective ones of said end wall panels and extending medially inwardly therefrom a handle structure secured to said medial partition structures and extending upwardly therefrom, a bottom panel foldably joined to the lower edge of one of said side walls, said medial partition structures including overlapping panels to form a multiply thickness of material midway between the ends of the carrier, characterised in that one of said medial partition structures is connected to the other of said medial partition structures by a bridging medial panel struck from said one medial partition structure and folded into overlapping relationship with said other medial partition structure to form said multiply thickness of material.

Referring to the drawings, the numeral 1 designates a side wall of the carrier to the bottom edge of which a glue flap 2 is hinged along fold line 3. End wall panel 4 is hinged to an end edge of side wall 1 along fold line 5 while end wall panel 6 is hinged to the opposite end edge of side wall 1 along fold line 7. Medial panels 8 and 9 are hinged to end wall panels 4 and 6 respectively along fold lines 10 and 11. Medial panels 8 and 9 are provided with locking notches 8a and 9a respectively.

The other side of the blank is similar to that just described and includes side wall 12 to the side edges of which end wall panels 13 and 14 are hinged respectively along fold lines 15 and 16. Medial panel 17 is hinged to end wall panel 13 along fold line 18 and medial panel 19 is hinged to end wall panel 14 along fold line 20. Medial panels 17 and 19 are provided with locking notches 17a and 19a respectively.

A bottom panel 21 is hinged to the bottom edge of side wall 12 along fold line 22 and is provided with medial fold line 23 and a group of carton manipulation apertures 24. Opposite edges of the bottom panel are each formed with a locking notch 25 and 26 respectively.

A handle structure for the carrier includes handle panels 27 and 28 which are hinged respectively to medial panels 9 and 19 along the fold lines 11 and 20.

5 An anchoring tab 62 is hinged to transverse partition panel 54 along fold lines 63 and 64 and, likewise, anchoring tab 65 is hinged to transverse partition panel 55 along fold lines 66 and 67. Similarly, anchoring tab 68 is hinged to transverse partition panel 56 along fold lines 69 and 70 and, likewise, anchoring tab 71 is hinged to transverse partition panel 57 along fold lines 72 and 73.

10 In order to form the completed carrier from the blank shown in Figure 2, an application of glue is first made to the inner surfaces of handle panels 27 and 28, to reinforcing panels 29 and 30 to the areas of the transverse partition panels 42, 43, 44 and 45 and to the
15 area of the medial partition panel 38 as shown by stippling in Figure 2. Thereafter, reinforcing panels 29 and 30 are elevated and folded over to the right along fold lines 31 and 32 respectively into positions of flat face contacting relation with the inner sur-
20 faces of handle panels 27 and 28 respectively.

Following this, the medial bridging panel 38a and transverse partition panels 54 and 55 together with anchoring tabs 62 and 65 are folded upwardly out of the
25 plane of the blank, as viewed in Figure 2 and rotated toward the left 180° along fold lines 58 and 59 respectively to occupy the positions shown in Figure 3. Generally simultaneously with the folding of medial bridging panel 38a and transverse partition panels 54
30 and 55, transverse partition panels 56 and 57 and their associated anchoring tabs 68 and 71 are folded upwardly toward the right and out of the plane of the blank along fold lines 60 and 61 respectively. The exposed surface of the medial bridging panel is thereby adhered
35 to the exposed surface of the medial partition panel and the exposed surfaces of all the transverse

inner surfaces of side walls 1 and 12 respectively and the medial bridging panel 38a is adhered to the exposed and adjacent margin of medial partition panel 40. Also glue is applied to auxiliary tab 33 as indicated by stippling in Figure 3. Then auxiliary tab 33 is folded over along fold line 32 and adhered to a portion of the inner surface of medial panel 17.

To complete formation of the carrier, an application of glue is made thereto as shown by stippling in Figure 4. More specifically glue is applied to medial panels 8, 9, 17 and 19, reinforcing panels 29 and 30, auxiliary panel 33 and glue flap 2. Bottom panel 21 is then folded respectively along fold lines 23. Following this the portion of the blank which is disposed above the fold line CL as viewed in Figure 4 is elevated and folded into superposed relationship with the portion of the blank disposed below the fold line CL into the position depicted in Figure 5 which represents the completed carrier in collapsed condition.

In order to set up the carrier from its collapsed condition as shown in Figure 5 into the condition shown in Figure 1, it is simply necessary to secure the side walls 1 and 12 against movement toward the left and to apply a force toward the left to the medial edges of end wall panels 6 and 14. This expands the carrier and moves the side walls apart. Simultaneously, the bottom panel 21 and auxiliary bottom panel 24 each fold into a flat plane. The carrier is then maintained in set-up condition as shown in Figure 1 by cooperation between the locking notches 8a, 17a or 9a, 19a of the notches 25, 26 at one end of bottom panel 21.

Therefore, by this invention an article carrier is provided which has a medial partition panel structure

CLAIMS

10

1. An article carrier comprising a pair of side walls (1, 12) disposed in parallel spaced relation to each other, end wall panels (4, 13; 6, 14) hinged respectively to the ends of said side walls and extending inwardly therefrom, a pair of medial partition structures (8, 17, 38; 9, 19, 40) foldably joined to the medial edges of respective ones of said end wall panels and extending medially inwardly therefrom, a handle structure (27, 28, 29, 30) secured to said medial partition structures and extending upwardly therefrom, a bottom panel (21) foldably joined to the lower edge of one of said side walls, said medial partition structures including overlapping panels to form a multiply thickness of material midway between the ends of the carrier characterised in that one of said medial partition structures (8, 17, 38) is connected to the other of said medial partition structures (9, 19, 40) by a bridging medial panel (38a) struck from said one medial

5. An article carrier according to claim 4, further characterised in that a portion of said bridging panel adjacent its hinged connection to said medial partition panel (38) is secured in overlapping relationship to the said medial partition panel to which it is hinged.

5

6. A blank for forming an article carrier according to any of the preceding claims.